congatec Application Note

Applicable Products: conga-CA, conga-CAx and conga-QA

Application Note Subject: Guide how to configure the USB Client port on congatec modules

Document Name: AN18_USB_Client_Port

Usage Designation: External

Application Note #18

Revision 1.0
## Revision History

<table>
<thead>
<tr>
<th>Revision</th>
<th>Date (dd.mm.yy)</th>
<th>Author</th>
<th>Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>03.12.09</td>
<td>MSW</td>
<td>Initial release</td>
</tr>
</tbody>
</table>
Preface

This Application Note provides information about the usage of the USB client port that is supported by some congatec modules. It shows what drivers and additional software is necessary to enable and use the congatec module as a USB client device.

Disclaimer

The information contained within this Application Note, including but not limited to any product specification, is subject to change without notice.

congatec AG provides no warranty with regard to this Application Note or any other information contained herein and hereby expressly disclaims any implied warranties of merchantability or fitness for any particular purpose with regard to any of the foregoing. congatec AG assumes no liability for any damages incurred directly or indirectly from any technical or typographical errors or omissions contained herein or for discrepancies between the product and the Application Note. In no event shall congatec AG be liable for any incidental, consequential, special, or exemplary damages, whether based on tort, contract or otherwise, arising out of or in connection with this Application Note or any other information contained herein or the use thereof.

Intended Audience

This Application Note is intended for technically qualified personnel. It is not intended for general audiences.

Symbols

The following symbols may be used in this Application Note:

- **Warning**

  *Warnings indicate conditions that, if not observed, can cause personal injury.*

- **Caution**

  *Cautions warn the user about how to prevent damage to hardware or loss of data.*

- **Note**

  *Notes call attention to important information that should be observed.*

Electrostatic Sensitive Device

All congatec AG products are electrostatic sensitive devices and are packaged accordingly. Do not open or handle a congatec AG product except at an electrostatic-free workstation. Additionally, do not ship or store congatec AG products near strong electrostatic, electromagnetic, magnetic, or radioactive fields unless the device is contained within its original manufacturer's packaging.
Copyright Notice

Copyright © 2009, congatec AG. All rights reserved. All text, pictures and graphics are protected by copyrights. No copying is permitted without written permission from congatec AG.

congatec AG has made every attempt to ensure that the information in this document is accurate yet the information contained within is supplied “as-is”.

Trademarks

Intel and Pentium are registered trademarks of Intel Corporation. Expresscard is a registered trademark of Personal Computer Memory Card International Association (PCMCIA). PCI Express is a registered trademark of Peripheral Component Interconnect Special Interest Group (PCI-SIG). I²C is a registered trademark of Philips Corporation. CompactFlash is a registered trademark of CompactFlash Association. Winbond is a registered trademark of Winbond Electronics Corp. AVR is a registered trademark of Atmel Corporation. ETX is a registered trademark of Kontron AG. AMICORE8 is a registered trademark of American Megatrends Inc. XpressROM is a registered trademark of Insyde Technology, Inc. Microsoft®, Windows®, Windows NT®, Windows CE and Windows XP® are registered trademarks of Microsoft Corporation. VxWorks is a registered trademark of WindRiver. conga, congatec and XTX are registered trademark of congatec AG. All product names and logos are property of their owners.
## Contents

1 Introduction ........................................................................................................................................... 6

2 USB Client Software Installation ........................................................................................................... 6
   2.1 System Configuration ......................................................................................................................... 6
   2.2 Intel USB Client Utility Installation .................................................................................................. 7
   2.3 Verifying USB Client controller installation and drive/folder sharing .............................................. 10

3 USB Host Software Installation ........................................................................................................... 11
   3.1 System Configuration ......................................................................................................................... 11
   3.2 Intel USB Client Host Utility Installation ........................................................................................ 11
   3.3 Verifying USB Host controller installation and drive/folder sharing ............................................... 16
1 Introduction

The Menlow (Menlow XL) platform (Z5xx series processors and US15W(PT) chipset) from Intel® offers the ability to configure a device, featuring this platform, as a USB Client Device using USB Client software for Windows XP and XPe. The following describes how to do this when using Windows XP.

2 USB Client Software Installation

2.1 System Configuration

1. Disable the Windows XP Firewall

![Windows Firewall Image]

2. Enable sharing for the required folders as shown below.

![My Pictures Properties Image]
2.2 Intel USB Client Utility Installation

1. Download the US15W_USB_Client_Drivers_XP.zip file from the conagtec website and unpack it to a location of your choice.

2. Double click on setup.exe and the following USB Client Utility will open. Click 'Next.'

3. While the installation is in progress click 'OK' or 'Continue' for any warning message (usually related to Windows logo certification) that may appear.

4. Once the setup is complete click 'Finish'
5. A pop-up USB Client Wizard screen appears immediately after the installation is completed as shown below. Click 'Next.'

6. Select the share options (File sharing = On; Shared Documents sharing = Off) and then click 'Next.'
7. If there are drives/folders that you do not want to share then you must highlight them and then click 'Unshare'. The 'Browse' and 'Add' options do not function.

8. Click 'OK' to finish this part of the installation.
2.3 Verifying USB Client controller installation and drive/folder sharing

1. Right click on 'My Computer', select 'Manage', then click on 'Device Manager'. In 'Device Manager' click on 'Network adapters' and Intel USBC Client controller should show up as "Intel(R) USB Client Ethernet Device" as shown below.

2. Open the properties of "Intel(R) USB Client Ethernet Device" and select the value 'Remote NDIS Device' for 'USB Client Device Interface':

---

Copyright © 2009 congatec AG
AN18_USB_Client_Port 10/16
3 USB Host Software Installation

3.1 System Configuration
Connect the client to the host PC using a USB cable.

3.2 Intel USB Client Host Utility Installation
1. Wait for Autoplay and cancel the AutoPlay dialog box. The ‘Launch Intel USBC Host Installer’ does not work.
2. Double click setup.exe located in the 'host wizard' folder.
3. Host installation utility appears as shown below. Click 'Next.'
4. Check 'Install the utility' and click 'Next.'

5. Wait for 'Setup Process' and click 'Next':
6. Finish the USB Client Host Utility Setup:

![Intel® USB Client Host Utility finished setup](image)

7. A USBC Host Wizard appears as shown below after the installation is completed.

![USBC Host Wizard welcome screen](image)
8. Next the 'Connecting' dialogue box appears, which automatically checks for IP and does the actual connection to the client.

![Connecting Dialogue Box]

9. The wizard searches for any shared folders/drives in the Client's system, as shown below.

![Enumerating remote shared folders]

Copyright © 2009 congatec AG
10. Finally, the screen below is shown, which details all the shared folders and the default drive letter that the client has been mapped to. In the example below, 'USBC' will be mapped to drive 'Z':

![USB Host Wizard - Map Drive](image1.png)

11. Click 'Finish.'

12. Once installed, the shared drives will automatically be remapped (after a PC reboot for example) and/or can be done manually by double clicking the USB Client Host Utility icon, which will display a screen similar to the one shown below. Options to 'Refresh' the connection, 'Remap' the drives (if mapped earlier) will appear as shown.

![USB Client Host Utility](image2.png)
3.3 Verifying USB Host controller installation and drive/folder sharing

Right click on 'My Computer', select 'Manage', then click on 'Device Manager'. In 'Device Manager' click on 'Network adapters' and Intel USBC Host utility should show up as "Intel(R) USB Client Remote NDIS device" as seen below.

Installation is now complete.